

APPENDIX A

Marked-Up Version of Amended Specification Paragraphs

1. At page 1, the section title and paragraph below is inserted before the section entitled “Title of Invention”. This is a newly added section of text.

Cross Reference To Related Applications

This application claims the benefit of International Application Published under the Patent Cooperation Treaty (PCT) having International Publication Number WO00/74587 filed June 2, 2000 entitled "METHOD AND APPARATUS FOR FILLING A DENTAL ROOT CANAL," of common assignee herewith.

2. At page 1, the section title below is inserted immediately before the paragraph “This invention relates to...”. This is a newly added section of text.

Field of the Invention

3. At page 2, the paragraph below is inserted immediately after the paragraph beginning “All the materials require as much as possible...”. This is a newly added section of text.

Therefore, a method and/or a apparatus for facilitating treatment of a dental root canal in a manner that overcomes limitations associated with conventional treatment technique is useful.

4. At page 2, the section title and drawing figure descriptions below are inserted immediately before the section entitled "Summary of the Invention". This is a new section title. The drawing figure description is moved from page 16.

Brief Description of the Drawings

Figure 1 is a schematic longitudinal cross-section through a tooth with one form of optical fibre and tip in place in a root canal.

Figure 2 is a enlarged sectional view of the optical fibre.

Figure 2a is a schematic view of a dental handpiece fitted with an optical fibre and tip and a tube for introducing photosensitiser into a root canal.

Figure 3 is a section through a single dose device for delivering a photosensitiser solution into the root canal.

Figure 4 is a perspective view of a laser housing connected to a dental handpiece.

Figure 5 is a view in the direction of the arrow "X" in Figure 4.

1

Detailed Description of the Invention

- 16

In the preceding detailed description, reference has been made to the accompanying drawings that form a part hereof, and in which are shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments, and certain variants thereof, have been described in sufficient detail to enable those skilled in the art to practice the invention. It is to be understood that other suitable embodiments may be utilized and that logical, mechanical, chemical and electrical changes may be made without departing from the spirit or scope of the invention. To avoid unnecessary detail, the description omits certain information known to those skilled in the art. The preceding detailed description is, therefore, not intended to be limited to the specific forms set forth herein, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents, as can be reasonably included within the spirit and scope of the appended claims.

8. At a new page after page 25, the section title and paragraph below is inserted. This is a newly added section of text.

Abstract of the Disclosure

A method of filling a dental root canal is disclosed herein. The method includes gaining access to the dental root canal and introducing a flowable photosensitiser into the dental root canal. After introducing the flowable photosensitiser into the dental root canal, an operation is performed for activating the flowable photosensitiser by exposing the walls of the dental root canal to light via an optical fibre within the dental root canal. Activating the flowable photosensitiser at least partially kills bacteria within the dental root canal and pulp chamber. After activating the flowable photosensitiser, the dental root canal is obturated.

APPENDIX B

Marked-Up Version of Amended Claims

1. (Amended) A method of treating a dental root canal, [which comprises the steps of :-]comprising:
 - (a) gaining access to the dental root canal;
 - (b) introducing a flowable photosensitiser into the dental root canal;
 - (c) activating the flowable photosensitiser by exposing the walls of the dental root canal to light via an optical fibre within the dental root canal to kill bacteria within the dental root canal and an associated pulp chamber; and
 - (d) obturating the dental root canal.
2. (Amended) [A]The method according to claim 1 wherein obturating the dental root canal includes obturating the dental root canal [is obturated]with at least one of gutta percha, silver [or]and titanium points.
3. (Amended) [A]The method according to claim 2 [in which]wherein:

obturating the dental root canal includes obturating the dental root canal[is obturated] with an obturation device [comprising];

the obturation device includes gutta percha carried on a rod-like carrier[,];

and

the obturation device [being]is shaped and dimensioned so that [on]upon forcing [it]the obturation device into the dental root canal, [the]said gutta percha is deformed and fills the dental root canal.
4. (Amended) [A]The method according to claim 1 [in which]wherein obturating the dental root canal includes obturating the dental root canal [is obturated] with a curable

filling material.

5. (Amended) [A]The method according to claim 4 wherein the curable filling material is cured by irradiation with light through [an]the optical fibre within the dental root canal

6. (Amended) [A]The method according to claim 5 wherein the [same] optical fibre [is] used for activating the flowable photosensitiser is used for curing [and]the curable filler material.

7. (Amended) [A]The method according to any one of the preceding claims wherein the optical fibre has a substantially isotropic tip.

8. (Amended) [A]The method according to any one of the preceding claims in which the optical fibre has a spherical or cylindrical portion at or close to the distal end to spread [radiation]light around and along the dental root canal.

9. (Amended) A kit of [parts]articles for facilitating treatment of[treating] a dental root canal which comprises:

- (a) a flowable photosensitiser;
- (b) an optical fibre having a portion at or close to the distal end which is shaped to spread radiation around and along the dental root canal, [said]the optical fibre being adapted for introduction into [a]the dental root canal so that the tip is capable of reaching the apical third of the dental root canal, [said]the optical fibre being connectable proximally with means for generating laser light; and
- (c) obturating means for sealing the dental root canal.

10. (Amended) [A]The kit according to claim 9 wherein the flowable sensitizer

[comprises]includes a dilute aqueous solution of toluidine blue.

11. (Amended) [A]The kit according to claim 9 wherein the obturating means [comprises]includes at least one of a preformed plug of gutta percha, [or] silver [or]and titanium points.

12. (Amended) [A]The kit according to any one of the [preceding] claims 9 to 11, inclusive, wherein the flowable sensitiser is contained in a cartridge which includes a delivery tube for introducing the flowable photosensitiser into the dental root canal.

13. (Amended) [A]The kit according to claim 9 wherein the obturating means [comprises]includes a flowable, curable sealing composition.

14. (Amended) [A]The kit according to any one of claims 8 to 13, inclusive, wherein the distal portion of the optical fibre [comprises]includes a translucent polymer composition containing a minor amount of a dispersed pigment sufficient to cause said laser light transmitted by the optical fibre to be scattered around the dental root canal.

15. (Amended) [A]The kit according to any one of claims 8 to 14, inclusive, wherein the distal portion of the optical fibre is formed by polymerising a light-curable polymerisable composition on an end of the optical fibre.

16. (Amended) Use in the manufacture of [materials]articles for facilitating sterilising and sealing of a dental root canal, said articles [of a kit of parts]comprising:

- (a) a flowable photosensitiser;
- (b) an optical fibre which is shaped and dimensioned to pass into a root canal to the region of the apex thereof, [said]the optical fibre being connectable proximally with means for generating laser light at a wavelength which is capable of being absorbed by the

